Distribution of Euploca confertifolia (Boraginaceae), including it two varietal components

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ABSTRACT

Euploca confertifolia is treated as having two intergrading infraspecific taxa, var, confertifolia and var. coldenioides, the latter restricted to northeastern Mexico. Distribution maps are provided for both. Published on-line www.phytologia.org *Phytologia* 98(4): 311-312 (Oct 6, 2016). ISSN 030319430.

KEY WORDS: Boraginaceae, Heliotropium, Euploca confertfolia

Feuillet and Halse (2016), following the molecular studies of Hilger and Diane (2003), treated *Heliotropium* sect. Orthostachys as constituting the genus **Euploca**. I have accepted their treatment changing the names in My Atlas of Texas Plants (Turner et al. 2003) accordingly. The former workers did not account for infraspecific taxa of the species concerned, mainly because their studies were confined to taxa occurring in the USA.

While **Euploca confertiflora** is represented in Texas by the typical variety **confertifolia** (Map 1), in north-central Mexico it is largely allopatric with a populational system given the name *Heliotropium confertifolium* var. *coldenioides* by I.M. Johnston. This variety does not occur in the USA, but it is quite common in Mexico where it is closely allopatric with the typical var. **confertifolia**, as indicated in Map 2. The following combination will legitimize its existence:

Euploca confertifolia var. coldenioides (I.M. Johnston) B.L. Turner, comb. nov.

Based upon *Heliotropium confertifolium* var. *coldenioides* I.M. Johnston, J. Arnold Arb. 29: 229. 1948. TYPE: MEXICO. TAMAULIPAS: 4 km W of Miquihuana, *Stanford et al.* 744 (GH).

According to Johnston, var. **coldenioides** "is a prostrate or distinctly caespitose plant and does not develop the erect or ascending leafy stems of the typical form of the species." Which seems to be the case. Additionally, it has mostly larger corollas borne upon shorter lateral stems, giving the entire plant a "heady-flowering" mat-like look, readily distinguished from the more erect typical variety.

Johnston also noted "Forms transitional to the variety *coldenioides* are found in Coahuila only at low altitudes in the eastern parts of the state." I myself have examined 3 hypothetical intermediates from southeastern Coahuila (LL, TEX): 45 km SW of Monterrey, *Barkley & Johnson 16254M*; 30 mi SW of Monterrey, *Barkley & Warnock 14725M*; 7 mi W of Saltillo, *Rollins & Tryon 58309*.

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LITERATURE CITED

Feuillet, C. and R.R. Halse. 2016. New combinations from *Heliotropium* to *Euploca* (Boraginales: Heliotropiaceae) for North American species. Phytoneuron 2016-5: 1-3.

Hilger, H.H. and Diane, N. 2003. A systematic analysis of Heliotropaceae (Boraginales) based on trnL and ITSI sequence data. Bot. Jahrb. 125: 19-51.

Johnston, I.M 1948. Original description of var. coldenioides J. Arnold Arb. 29: 229.

Turner, B.L. et al. 2003. Atlas of the Vascular Plants of Texas. SIDA, Bot. Misc. 24.



